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EXAMINER

DIVECHA, KAMAL B

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/972,362

Applicant(s)

AHMAD ET AL.

Examiner

KAMAL B. DIVECHA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9 and 21-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,21-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

Claims 1-2, 4-9 and 21-36 are pending in this Office Action.

Applicant cancelled claims 3 and 10-20 and added new claims 21-36.

The amendment filed July 12, 2005 invokes 35 U. S. C. 112, first paragraph rejection and 35 U. S. C. 101 rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1-2, 4-9 and 21-36 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure, which is not enabling. Storage area network (SAN) was/is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Applicant disclosure was/is drawn to a storage area network of the type has a plurality of components including one or more digital data processors in communication with one or more storage devices via a switching fabric. An interface process e.g. resident on a manager digital data processor permits the operator/ administrator to effect execution of at least a process residing on the manager and at least one process, such as management application, residing on another SAN component (i.e. see abstract and specification paragraph 132); and the amended claimed invention is drawn to a system of configuring and managing the hosts in the network. The Disclosure is strictly limited to Storage area network and management and therefore the claimed invention should be limited to storage area network also. As such, storage area network

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is a critical and/or essential to the practice of the invention and should be included in the claims.

Therefore, the disclosure does not provide an enabling support for the claimed invention because of the essential element not claimed and wherein the disclosure strictly limits the invention to the storage area network including interface process for managing the SAN components.

2. Claims 1-2, 4-9 and 21-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims recite the limitation “an interface process in communication with the manager, a switching fabric component, and the hosts, the interface process effecting execution of at least one process residing on the system including the manager, at least one application process residing on the switching fabric component, and at least one application process residing on at least one host” and “a store containing information regarding one or more hosts and the switching fabric component and one or more application processes residing on selected hosts and the switching fabric component”. However, the specification merely describes in a storage area network of the type has a plurality of components including one or more digital data processors in communication with one or more storage devices via a switching fabric. An interface process e.g. resident on a manager digital data processor permits the operator/ administrator to effect execution of at least a process residing on the manager and at least one process, such as management application, residing on another SAN component (i.e. see abstract and specification paragraph 132), hence the above claimed limitation presents new subject matter situations and

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was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 31-37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed subject matter is a program or a code not embodied with a tangible medium that would enable one of ordinary skilled in the art to execute and perform the functions of the claimed invention. As such, the claims are limited to a program and are therefore non-statutory.

Applicant's arguments filed July 12, 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that the Lagueux does not teach the claim requirement of an interface process for effecting execution of a process on the system including the manager and at least one process residing on a host in the network and effect execution of a process on a switching fabric component (Remarks, pg. 8-10 paragraph 6). Examiner traverses and disagrees with the applicant. Lagueux, Jr. explicitly teaches a user interface (interface process) with an image produced by data processing structures for use in configuring a storage server. The image includes a window having a field for displaying a logo, a field for displaying basic information concerning the chassis of the server and set of icons, which when selected launches management application (see applicant's abstract; an interface process that effects

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execution of a process or applications on the system including the manager and other management applications, and see Lagueux, fig. 18 and col. 22 L65 to col. 23 L21, col. 7 L20-31). Also, user launches a host manager using the button 1405 of fig. 18.

In response to applicant's argument that Lagueux does not teach or suggest the display of graphical objects representing application processes residing in hosts and the switching component (applicant's remarks pg. 10). Examiner disagrees with the applicant. Lagueux does teach and disclose the display of graphical objects representing application processes residing in hosts and switching component (Lagueux, see fig. 18 item #1403, 1407 and col. 23 L1-5).

In response to applicant's argument on page 11 that Nowhere in the cited columns teach or suggest the claim requirement that selection of an object executes an application process on a host or switching component in a network. Examiner disagrees because Lagueux does teach the process wherein selection of an object executes an application process on a host (see Lagueux, col. 23 L1-5).

In response to applicant's argument on pg. 11 that nowhere does the cited reference teach or suggest the claim requirement that a store contains information on application processes in hosts and a switching component in a network. Examiner also argues that nowhere in the applicant specification teach or suggest a store containing information on application processes in hosts and a switching component in a network. Lagueux teaches and discloses a store storing management and routing information in tables such as table 116, which can be accessed through management interface. This persistent data storage maintains a wide variety configuration information for the system and it includes a list of all the instances of the device driver modules, and their unique device Ids (Lagueux, col. 16 L1-50). Lagueux also discloses the management

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application process for monitoring the long running processes in the system (see fig. 18 item #1408). Therefore it is obvious that the monitored information would have been stored somewhere, and as such it would have been obvious to modify Lagueux in order to implement a store that will contain information on application processes in hosts and switching components.

In response to applicants arguments that the reference does not teach or suggest the interface process accesses the store, upon selection of one graphical object representing one host to identify at least one application process residing on the host, if any (applicant's specification paragraph 134). That is if the host doesn't have any application process, than there would be no application process identified. Lagueux teaches the process wherein the cache (store) includes logic processes which communicate with an interface (interface process). Data structures in the cache include a local cache memory allocation, a cache table which identifies the data stored in the cache and a drive interface (col. 14 L58-64). Lagueux also teaches the process wherein upon selecting a graphical object representing a SAN component, presents the information about the component (fig. 18-19, col. 23 L19 to col. 24 L13). Therefore, it would have been obvious to modify Lagueux in order to access the cache (store), upon selection of image representing a host, to display the cache table (cache table which includes the application processes if any) of the host, to identify the data (application processes if any) in the host.

Therefore, the combination and/or modification made to Lagueux in view of Nolan teaches all the limitations as claimed in the instant application and as such the amendment does not over come the prior art, hence the claimed invention is not patentable over prior art.

Rejection is maintained at least for the reasons set forth above.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-2, 4-9, 21-36 are rejected under 35 U.S.C. 103(a) as being obvious over Lagueux, Jr. et al. (hereinafter Lagueux, U. S. Patent No. 6,538,669 B1) in view of Nolan et al. (hereinafter Nolan, U. S. Patent No. 6,446,141 B1).

As per claim 1, Lagueux discloses a system in communication with a network comprising one or more storage devices and one or more hosts via a switching fabric component (col. 5L54-59; fig. 17 and fig. 1), comprising: a manager in communication with the storage devices and hosts in the network (fig. 2 item #120, fig. 18, and fig. 19; col. 23 L18-26 and col. 11 L31-39 and L63-64), an interface process in communication with the manager, a switching fabric component and the hosts, the interface process effecting execution of at least one process residing on the

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system including the manager, at least one application process residing on the switching fabric component, and at least one application process residing on another SAN component (col. 7 L20-31; col. 10 L21-28; col. 22 L65-67 to col. 23 L1-67 to col. 24 L1-7), however, Lagueux does not explicitly disclose the process wherein application processes reside on the hosts, wherein the application processes (such as web browser, telnet) configure and manage the hosts in which application processes execute.

Nolan, from the same field of endeavor, explicitly discloses an application process such as web-based browser residing on one of the component of the SAN for at least one of configuring and managing the components (col. 18 L43-49). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Nolan as stated above with Lagueux in order to use web based browser residing in one component of the SAN for at least one of configuring and managing the components.

One of ordinary skilled in the art would have been motivated because the application program such as web based browser and the interface process would have provided controls for monitoring, configuring and managing the system (Nolan, col. 18 L44-49).

As per claim 2, Lagueux discloses a graphical output device coupled to the interface process for displaying one or more graphical objects each representing the application processes on the hosts or the switching fabric component, wherein the interface process being coupled to the graphical output device for effecting the display of the graphical objects on the graphical output device (col. 2 L29-45 and col. 23 L57-60 and fig. 18 item #1408).

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As per claim 4, Lagueux discloses the process wherein the interface process responds to selection of one of the objects representing one application process by effecting execution of the application process represented by that object (col. 22 L65-67 to col. 23 L1-5 and fig. 18).

As per claim 5, Lagueux discloses the manager maintaining a storage (read as store) containing information regarding one or more hosts and the switching fabric component (fig. 22 and fig. 2 item #150) and one or more application processes residing on selected hosts and the switching fabric component (col. 14 L58-67 and fig. 11).

As per claim 6, Lagueux discloses the process wherein the cache (store) is in communication with the interface (interface process), wherein cache includes a local cache memory allocation, a cache table that identifies the data stored (data, applications etc) in the cache and a drive interface (col. 14 L58-64). Lagueux also discloses the process wherein upon selecting a graphical object representing a SAN component, presents the information about the component (identifies and presents the information from the cache, fig. 18-19, col. 23 L19 to col. 24 L13). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lagueux in order to access the cache (store), upon selection of image representing a host, to display the cache table (cache table which includes the application processes if any) residing on the host, to identify the data (application processes if any) in the host. One of ordinary skilled in the art would have been motivated because it would have enabled an administrator to monitor and manage the applications residing in the hosts or components of the system.

As per claim 7, Lagueux and Nolan disclose the process wherein the application process used is a web-based browser application (Nolan, col. 18 L43-49; col. 23 L19-21; Lagueux, col. 23 L18-30).

As per claim 8, Lagueux discloses the method wherein the information on the hosts includes an identifier for the host and an application processes residing on the host (fig. 19 item #1457 and 1456 and fig. 18 item #1403-1408).

As per claim 9, Lagueux discloses the method wherein at least one of the graphical objects representing a SAN component (one host) provides a textual description of that component (fig. 23 item #1553 and 1555).

As per claims 21-36, they do not teach or further define over the limitations in claims 1-2, 4-9. Therefore, claims 21-36 are rejected for the same reasons as set forth in claims 1-2 and 4-9.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (see PTO-892 mailed on 4/07/2005).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Flex schedule 8 hr days (10.00am-6.30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KD

August 17, 2005.


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER